

10/539723

Amendments to the Claims:

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This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A [[P]]plant cell which is genetically modified, the genetic modification leading to the reduction of the activity of one or more SSIII proteins occurring endogenously in said [[the]] plant cell and to the reduction of the activity of one or more BEI proteins which occur endogenously in said [[the]] plant cell and to the reduction of the activity of one or more BEII proteins which occur endogenously in said [[the]] plant cell in comparison to corresponding plant cells, of wild-type plants, which have not been genetically modified, wherein ~~whereas~~ said ~~the~~ genetically modified plant cell~~[[s]]~~ synthesizes a modified starch, comprising starch which after gelatinization of a 6% suspension in water forms a gel with a gel strength that is increased by at least 300% in comparison with the gel strength of starch extracted from corresponding plant cells, of wild-type plants, which have not been genetically modified.

Claim 2 (Currently Amended): A [[P]]plant cell according to Claim 1, wherein said [[the]] genetic modification comprises [[is]] the introduction of one or more foreign nucleic acid molecules whose presence and/or expression leads to the reduction of the activity of one or more SSIII, [[and]] BEI and BEII proteins occurring in the plant cell in comparison with corresponding plant cells, of wild-type plants, which have not been genetically modified.

Claim 3 (Currently Amended): A [[P]]plant comprising ~~containing~~ plant cells according to ~~one of~~ Claim~~[[s]]~~ 1 ~~or~~ 2.

Claim 4 (Currently Amended): A [[M]]method for generating a genetically modified plant, ~~in which~~ comprising:

a) ~~a plant cell which synthesizes a modified starch, which starch after gelatinization of a 6% suspension in water forms a gel with a gel strength that is increased by at least 300% in comparison with the gel strength of starch extracted from corresponding plant cells, of wild type plants, which have not been genetically modified, comprising the genetic modification of~~

genetically modifying ~~[[the]]~~ a plant cell, said ~~[[the]]~~ genetic modification leading to the reduction of the activity of one or more SSIII proteins which occur endogenously in the plant cell and to the reduction of the activity of one or more BEI proteins which occur endogenously in the plant cell and to the reduction of the activity of one or more BEII proteins which occur endogenously in the plant cell, in comparison with corresponding plant cells, of wild-type plants, which have not been genetically modified, ~~is generated~~;

b) regenerating a plant ~~is regenerated~~ from, or using, said ~~[[the]]~~ plant cell generated in accordance with a); and

c) optionally generating ~~if appropriate~~, further plants ~~are generated~~ from said ~~[[the]]~~ plant generated in accordance with step b);

wherein said genetically modified plant cell synthesizes a modified starch, which starch after gelatinization of a 6% suspension in water forms a gel with a gel strength that is increased by at least 300% in comparison with the gel strength of starch extracted from corresponding plant cells, of wild-type plants, which have not been genetically modified.

Claim 5 (Currently Amended): A ~~[[M]]~~ method for generating a transgenic plant according to Claim 4 which synthesizes a modified starch, comprising in which

a) genetically modifying a plant cell ~~is genetically modified~~ by ~~[[the]]~~ introducing ~~introduction of~~ one or more foreign nucleic acid molecules whose presence and/or expression leads to the reduction of the activity of in each case at least one SSIII, BEI and BEII protein in comparison with corresponding wild-type plant cells which have not been genetically modified;

b) regenerating a plant ~~is regenerated~~ from, or using, said ~~[[the]]~~ cell generated in accordance with a); and

c) optionally generating ~~if appropriate~~, further plants ~~are generated~~ from said ~~[[the]]~~ plants generated in accordance with step b).

Claim 6 (Currently Amended): A ~~[[P]]~~ plant according to Claim 3 ~~or obtainable by the method according to one of Claims 4 or 5~~, wherein said plant which is a starch-storing plant.

Claim 7 (Currently Amended): A ~~[[P]]~~ plant according to Claim 6, wherein said plant which is a potato plant.

Claim 8 (Currently Amended): Propagation material of plants according to ~~one of~~
Claim[[s]] 3, 6 or 7, containing at least one plant cell according to ~~one of Claims 1 or 2.~~

Claim 9 (Currently Amended): A method for generating plant cells, comprising
genetically modifying a plant cell by using ~~Use of~~ one or more nucleic acid molecules which
encode proteins with the enzymatic activity of at least one SSIII, at least one BEI and/or at least
one BEII protein or their fragments for the generation of plant cells according to ~~one of~~
Claim[[s]] 1 or 2 or of plants according to ~~one of Claims 3 or 6 to 7.~~

Claim 10 (Currently Amended): Starch ~~which can be~~ obtained from plant cells according
to ~~one of Claim[[s]] 1 or 2 or from a plant according to one of Claims 3, 6 or 7 or from~~
~~propagation material according to Claim 8.~~

Claim 11 (Currently Amended): Starch according to Claim 10, wherein said starch ~~which~~
is a potato starch.

Claim 12 (Currently Amended): A [[M]]method for producing a starch according to one
~~of Claims 10 or 11, comprising~~ extracting the extraction of said [[the]] starch from a plant
~~according to one of Claim[[s]] 3, 6 or 7 and/or from starch storing parts of such a plant and/or~~
~~from a plant cell according to one of Claim[[s]] 1 or 2 and/or from propagation material~~
~~according to Claim 8.~~

Claim 13 (Currently Amended): Starch ~~according to one of Claims 10 or 11, obtainable~~
obtained by the [[a]] method according to Claim 12.

Claim 14 (Currently Amended): A [[M]]method for modifying the starch of a plant,
~~comprising the method for generating a plant according to one of Claim[[s]] 3, 6 or 7 and~~
~~obtaining starch from said [[the]] plant or starch-containing parts thereof.~~

Claim 15 (New): A plant obtainable by the method according to Claim 4, wherein said

plant is a starch-storing plant.

Claim 16 (New): Propagation material of plants according to Claim 15.

Claim 17 (New): Starch obtained from a plant according to Claim 15.

Claim 18 (New): Starch according to Claim 17, wherein said starch is a potato starch.

Claim 19: (New) A method for producing a starch, comprising extracting said starch from a plant according to Claim 15.

Claim 20 (New): A method for modifying the starch of a plant, comprising generating a plant according to Claim 15 and obtaining starch from said plant or starch-containing parts thereof.

Claim 21 (New): A method for generating plants, comprising genetically modifying a plant cell by using one or more nucleic acid molecules which encode proteins with the enzymatic activity of at least one SSIII, at least one BEI and/or at least one BEII protein or their fragments for the generation of plants according to Claim 15.